DEVICE INTERACTION WITH COMBINATION OF RINGS

BACKGROUND

[0001] Technological advances in computer hardware, software and networking have lead to increased demand for electronic information exchange rather than through conventional techniques such as paper and telephone correspondence, for example. Such electronic communication can provide split-second, reliable data transfer between essentially any two locations throughout the world. Many industries and consumers are leveraging such technology to improve efficiency and decrease cost through web-based (e.g., on-line) services. For example, consumers can purchase goods or services, review bank statements, research products and companies, obtain real-time stock quotes, download pictures, download video, communicate in real-time, etc. with the click of a mouse and at the convenience of home.

[0002] As the amount of available electronic data grows, it becomes more important to interact and/or utilize such data in a manageable and user-friendly manner. As a result, computing devices have incorporated a variety of techniques and/or methods for inputting information. Computing devices facilitate entering information employing devices such as, but not limited to, keyboards, keypads, touch pads, touch-screens, speakers, stylus' (e.g., wands), writing pads, voice recognition hardware, and the like. Yet, such conventional data input techniques have not adapted to keep pace with the technological advances in the devices for which they are used. In addition, a typically input device such as a mouse, a pointing device, a stylus, a touch pad, and the like can be difficult to use while in motion (e.g., walking, running, driving, flying, etc.). Although wireless headsets have mitigated the difficulties in regards to interacting with devices and/or device data, such devices tend to be uncomfortable, non-private (e.g., communications and interactions can be overheard), and an eye-sore for most.

SUMMARY

[0003] The following presents a simplified summary of the innovation in order to provide a basic understanding of some aspects described herein. This summary is not an extensive overview of the claimed subject matter. It is intended to neither identify key or critical elements of the claimed subject matter nor delineate the scope of the subject innovation. Its sole purpose is to present some concepts of the claimed subject matter in a simplified form as a prelude to the more detailed description that is presented later.

[0004] The subject innovation relates to systems and/or methods that facilitates controlling and interacting with computing devices in a more convenient and efficient manner. A ring component can be worn on a digit or a toe on a user, wherein such ring component can be utilized to communicate with a device using one or more rings as inputs. For instance, the ring component can detect conductance, inductance, resistance, and other properties related to one or more digits (e.g., fingers) or toes. The ring component can further identify motions, gestures, or interactions for wireless data input or wireless interaction in connection with the device, a display (e.g., user interface) on the device, or displayed data. In one example, the ring component can detect a twisting motion from a user's hand, which can correspond to moving a scroll bar displayed by a user interface (UI) on the device.

[0005] Furthermore, the ring component can incorporate various sensors in order to collect data in real-time associated with the user. In general, the ring component can enable data collection and communication such as receiving inputs from a user and communicating outputs to a user. Additionally, the ring component can provide proximity alerts in connection with a friend or contact being within a determined geographic proximity of the user wearing the ring component. In another instance, the rings can be extended to other parts of the body (e.g., waist, neck, legs, etc.) to enable full-body data collection. Moreover, the device or display on the device can integrate physical feedback in connection with the rings to optimize usability. In other aspects of the claimed subject matter, methods are provided that facilitate incorporating one or more sensors into a ring component worn by a user to collect information for device interaction.

[0006] The following description and the annexed drawings set forth in detail certain illustrative aspects of the claimed subject matter. These aspects are indicative, however, of but a few of the various ways in which the principles of the innovation may be employed and the claimed subject matter is intended to include all such aspects and their equivalents. Other advantages and novel features of the claimed subject matter will become apparent from the following detailed description of the innovation when considered in conjunction with the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. **1** illustrates a block diagram of an exemplary system that facilitates communicating with a device utilizing a ring component worn by a user on a digit.

[0008] FIG. **2** illustrates a block diagram of an exemplary system that facilitates incorporating one or more sensors into a ring component worn by a user to collect information for device interaction.

[0009] FIG. **3** illustrates a block diagram of an exemplary system that facilitates employing one or more ring components to communicate or interface with a device displaying a portion of data.

[0010] FIG. **4** illustrates a block diagram of an exemplary system that facilitates utilizing a ring component worn by a user on a digit to output information or data to such user.

[0011] FIG. **5** illustrates a block diagram of exemplary system that facilitates communicating with a portion of data on a device in accordance with an aspect of the subject innovation.

[0012] FIG. **6** illustrates a block diagram of an exemplary system that facilitates inferring and/or predicting a user's intended interaction with a device with a ring component.

[0013] FIG. **7** illustrates an exemplary methodology for communicating with a device utilizing a ring component worn by a user on a digit.

[0014] FIG. **8** illustrates an exemplary methodology that facilitates employing one or more ring components to communicate or interface with a device displaying a portion of data.

[0015] FIG. **9** illustrates an exemplary networking environment, wherein the novel aspects of the claimed subject matter can be employed.